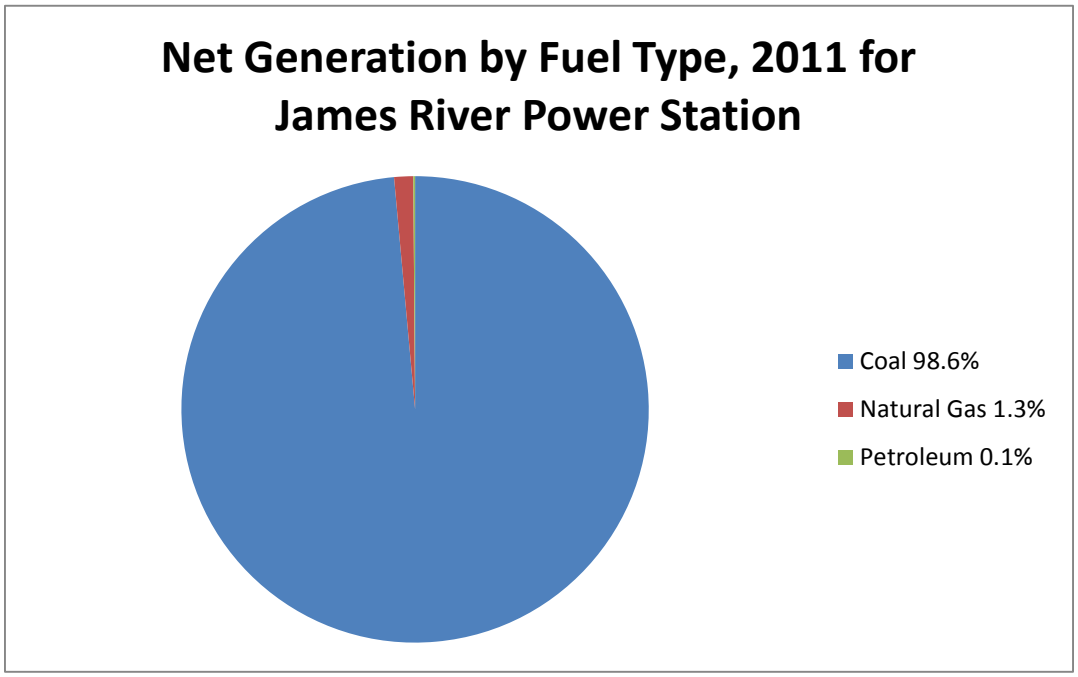
Missouri Department of Natural Resources

City Utilities of Springfield
Power Plant Name: James River Power Station
Electric Generation and Emissions in 2011

Generation Tables

	Fuel Consumption, MMBTUs	Percent of Total		Net Electric Power Generated, MWh	Percent of Total	
Non-renewable sources						
Coal	11,436,573	98.4%	98.4%	965,054	98.6%	98.6%
Natural Gas	167,138	1.4%	1.4%	12,860	1.3%	1.3%
Petroleum	15,750	0.1%	0.1%	1,214	0.1%	0.1%
Nuclear						
Other						
Non-renewable total	**11,619,461**	**100.0%**	**100.0%**	**979,128**	**100.0%**	**100.0%**
Renewable sources						
Biomass						
Hydroelectric						
Landfill Gas						
Solar						
Waste Fuels						
Wind						
Wood						
Renewable total						
Grand total	**11,619,461**		**100.0%**	**979,128**		**100.0%**

Fuel Type	Physical Units	Number of Units
Sub-bituminous Coal	Short Tons	653,836
Natural Gas	MCf	163,713
Distillate Fuel Oil	Barrels	2,702


Net Generation by Fuel Type, 2011 for James River Power Station
Coal 98.6%
Natural Gas 1.3%
Petroleum 0.1%

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Power Plant Nameplate information for James River Power Station

Plant Name	County Location	Generator	Generator Type	Generator Status	Nameplate Capacity (MW)
James River Power Station		*All Operating Generators*			*1,802.0*
James River Power Station	Greene	GT1	Combustion (Gas) Turbine (includes jet engine design)	Operating - in service	384.0
James River Power Station	Greene	GT2	Combustion (Gas) Turbine (includes jet engine design)	Operating - in service	406.0
James River Power Station	Greene	1	Steam Turbine, including nuclear, geothermal and solar steam (does not include combined cycle)	Operating - in service	88.0
James River Power Station	Greene	2	Steam Turbine, including nuclear, geothermal and solar steam (does not include combined cycle)	Operating - in service	88.0
James River Power Station	Greene	3	Steam Turbine, including nuclear, geothermal and solar steam (does not include combined cycle)	Operating - in service	176.0
James River Power Station	Greene	4	Steam Turbine, including nuclear, geothermal and solar steam (does not include combined cycle)	Operating - in service	240.0
James River Power Station	Greene	5	Steam Turbine, including nuclear, geothermal and solar steam (does not include	Operating - in service	420.0

			combined cycle)		

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Emissions from Electricity Generated in 2011: James River Power Station

	CO2 Equivalent (TONS)	Carbon Dioxide (CO2) (TONS)	Methane (CH4) (TONS)	Nitrogen Dioxide (NO2) (TONS)
James River Power Station	41,652,296	4,936,548	555,638	80,798

	Sulfur Dioxide (SO2) (TONS)	Annual Nitrogen Oxide (NOx) (TONS)	Summer Nitrogen Oxide (NOx) (TONS)
James River Power Station	7,140	0.0054	0.0054

Identified Flue Gas Desulfurization (FGD) controls installed on James River Power Station power plant

Plant	Control Equipment	Sorbent Type
	No FGD Controls Installed	

Identified Flue Gas Particulate (FGP) controls installed on James River Power Station power plant

Plant	Control Equipment
James River Power Station	Electrostatic precipitator, cold side, without flue gas conditioning

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Notes:
Generation, emissions and pollution control data include power plants owned by the utility and located in Missouri.

Emissions data calculated by Missouri Department of Natural Resources, Division of Energy, from EIA Fuel Consumption Data

Fuel Consumption and Generation Data from United States Energy Information Administration, Form 923, United States Department of Energy
http://www.eia.gov/electricity/data/eia923

Pollution control data (FGD and FGP equipment) from United States Energy Information Administration, Form 860, United States Department of Energy
http://www.eia.gov/electricity/data/eia860/index.html

Emissions factors for fuel-based generation from United States Environmental Protection Agency "Emission Factors for Greenhouse Gas Inventories", November 7, 2011,
http://www.epa.gov/climateleadership/documents/emission-factors.pdf